Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A high frequency induction heater built in an injection mold comprising:

at least a stamper, fabricated by micro electromechanical system (MEMS)technologies, having a micro pattern of a micro system;

at least a high frequency induction heating module, fabricated by MEMS technologies, positioned on a side of the stamper, the high frequency induction heating module comprising at least a set of high frequency induction heating coils, the high frequency induction heating module being controlled by a driver positioned outside the injection mold; and

at least a set of thermometer detectors, fabricated by MEMS technologies, positioned between the set of high frequency induction heating coils, the set of thermometer detectors being controlled by a temperature controller positioned outside the injection mold;

wherein the high frequency induction heating module emits electromagnetic waves which penetrate the stamper and applies a local heat to a plastic such that sections of the plastic having a thin thickness or sections having a large difference of cross sectional areas remains fluid, in such case the micro pattern of the micro system is accurately transferred to the plastic by injection compression molding technologies.

2. (Original) The high frequency induction heater of claim 1 wherein the MEMS

technologies comprise the following steps:

(a) depositing an oxide layer or a nitride layer onto a metal substrate as an insulating layer;

(b) depositing a platinum layer, and performing a photo-etching process which includes coating a photoresist pattern, exposing, developing, and etching, for defining a thermometer detector pattern;

(c) depositing an oxide layer or a nitride layer as an insulating layer to cover the thermometer detector pattern;

(d) coating a thick photoresist pattern with high solidification strength, performing an exposure process and a development process, electroforming a copper layer to a desirable height, and performing a chemical mechanical polishing (CMP) process to planarize the copper layer for forming the set of high frequency induction heating coils;

(e) coating a thick photoresist pattern with high solidification strength, performing an exposure process and a development process, electroforming a copper layer to a desirable height, and performing a CMP process to planarize the copper layer for forming via holes;

(f) coating a thick photoresist pattern with high solidification strength, performing an exposure process and a development process, electroforming a copper layer to a desirable height, and performing a CMP process to planarize the copper layer for forming an external power circuit; and

(g) polishing the metal substrate.

3. (Original) The high frequency induction heater of claim 1 wherein a microstructure is inserted into the stamper by MEMS electroforming technologies, and the high frequency induction heater positioned under the microstructure or the stamper is capable of applying the local heat and controlling an overall temperature so that the plastic is fluid and a deformation due to a temperature difference is prevented.

4. (Original) The high frequency induction heater of claim 3 wherein a material of the microstructure is a metal identical to that of the stamper or a metal differing from that of the stamper, the material identical to that of the stamper is for controlling the overall temperature, the metal differing from that of the stamper is for applying the local heat, if the material of the microstructure differs from that of the stamper, the microstructure then has a higher magnetic permeability or a higher induction heating ability than the stamper.

5. (Currently amended) The high frequency induction heater of claim [[1]] 2 wherein the stamper and the high frequency induction heater are fabricated individually or jointly, and if the stamper and the high frequency induction heater are fabricated jointly, then step (g) ~~of claim 2~~ is ~~replaced~~ further defined by the following steps:

turning the metal substrate over;

performing a photo-etching process to etch the metal substrate;

performing an electroforming process to form a magnetic layer comprising iron and nickel for forming a microstructure; and

performing a CMP process to planarize the magnetic layer for forming an insert mold having a built-in high frequency induction heater.

6. (Original) The high frequency induction heater of claim 1 wherein the set of high frequency induction heating coils are positioned under a surface of the high frequency induction heater, thus a multi-level interconnect technology is adopted to locate the external power circuit in a bottom layer, and only a microstructure of the set of high frequency induction heating coils is exposed in an upper layer.

7. (Original) The high frequency induction heater of claim 1 being capable of being positioned in a stationary mold-half and/or in a movable mold-half.

8. (Original) The high frequency induction heater of claim 1 wherein the high frequency induction heater and the thermometer detectors are controlled by a plurality of drivers and temperature controllers operating individually.

9. (Original) The high frequency induction heater of claim 1 being capable of fabricating wafer-level plastic discs (6 inches to 8 inches) by injection compression molding technologies, and further performing a wafer-level package process on a substrate having ICs or MEMS elements.

10-15. (Cancelled).